

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2005/000026

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H01H 71/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2787238 A1 (SCHNEIDER ELECTRIC INDUSTRIES SA), 16 June 2000 (16.06.2000), abstract, see the figures ---	1
A	US 5298874 A (ROBERT MOREL ET AL), 29 March 1994 (29.03.1994), column 4, line 64 - line 68, see the figures -- -----	1

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

2 May 2005

Date of mailing of the international search report

11-05-2005

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Swedish Patent Office  
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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

01/04/2005

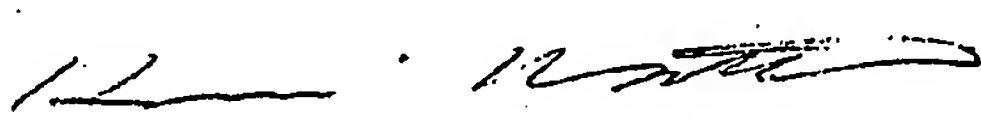
International application No.  
PCT/FI 2005/000026




FR	2787238	A1	16/06/2000	CN	1257297	A	21/06/2000
				ES	2164572	A	16/02/2002
				IT	1309382	B	22/01/2002
				IT	VR990100	A	04/06/2001
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US	5298874	A	29/03/1994	AT	148960	T	15/02/1997
				AU	660489	B	29/06/1995
				AU	2639692	A	22/04/1993
				BR	9203996	A	27/04/1993
				CA	2080064	A,C	16/04/1993
				CN	1041361	B,C	23/12/1998
				CN	1071784	A	05/05/1993
				DE	69217441	D,T	10/07/1997
				EP	0538149	A,B	21/04/1993
				SE	0538149	T3	
				ES	2099235	T	16/05/1997
				FR	2682530	A,B	16/04/1993
				JP	3392441	B	31/03/2003
				JP	5217489	A	27/08/1993
				MX	9205924	A	01/04/1993
				ZA	9207904	A	21/04/1993

VIII-2-1	<b>Declaration: Entitlement to apply for and be granted a patent</b> Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate: Name (LAST, First)	in relation to this international application  ABB OY is entitled to apply for and be granted a patent by virtue of the following:
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, MATTLAR, Harri
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, KOLMONEN, Rainer
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, SALO, Juho
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, PIKKALA, Osmo
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, SUUTARINEN, Aki
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, ALANEN, Jarkko
VIII-2-1(i)		ABB OY is entitled as employer of the inventor, TUONONEN, Martti
VIII-2-1(x)	This declaration is made for the purposes of:	all designations except the designation of the United States of America

VIII-3-1	<b>Declaration: Entitlement to claim priority</b> Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)) Name	in relation to the international application No. PCT/FI2005/000026  ABB OY is entitled to claim priority of earlier application No. 20040071 by virtue of the following:
VIII-3-1(vii)		transfer of entitlement from ABB OY to ABB OY by way of merger agreement between ABB OY and ABB Holding Oy, dated 31 December 2004 (31.12.2004)
VIII-3-1(viii)		the applicant's name changed from previous ABB OY to new ABB OY (two different companies although the name is the same) on 31 December 2004 (31.12.2004)
VIII-3-1(i x)	This declaration is made for the purposes of:	all designations

VIII-4-1	<p>Declaration: Inventorship (only for the purposes of the designation of the United States of America) Declaration of Inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America:</p>	<p>I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.</p> <p>This declaration is directed to international application PCT/FI2005/000026 (if furnishing declaration pursuant to Rule 26ter).</p> <p>I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.</p> <p>I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications", by application number, country or Member of the World Trade Organization, day, month, and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.</p>
VIII-4-1-1	Prior applications:	

		<p>I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.</p> <p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>
VIII-4-1-1-1	Name (LAST, First)	MATTLAR, Harri
VIII-4-1-1-2	Residence: (city and either US State, if applicable, or country)	Iskmo, Finland
VIII-4-1-1-3	Mailing address:	Jungsundsvägen 809 FI-65760 Iskmo Finland
VIII-4-1-1-4	Citizenship:	FI
VIII-4-1-1-5	Inventor's Signature: (If not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	
VIII-4-1-1-6	Date: (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	11.3.2005

VIII-4-1-2-1	Name (LAST, First)	KOLMONEN, Rainer
VIII-4-1-2-2	Residence: (city and either US State, if applicable, or country)	Laihia, Finland
VIII-4-1-2-3	Mailing address:	Urputie 3 as 1 FI-66400 Laihia Finland
VIII-4-1-2-4	Citizenship:	FI
VIII-4-1-2-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	
VIII-4-1-2-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	11.3.2005
VIII-4-1-3-1	Name (LAST, First)	SALO, Juho
VIII-4-1-3-2	Residence: (city and either US State, if applicable, or country)	Vaasa, Finland
VIII-4-1-3-3	Mailing address:	Huuhkajankatu 19 A 2 FI-65320 Vaasa Finland
VIII-4-1-3-4	Citizenship:	FI
VIII-4-1-3-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	
VIII-4-1-3-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	11.3.2005
VIII-4-1-4-1	Name (LAST, First)	PIKKALA, Osmo
VIII-4-1-4-2	Residence: (city and either US State, if applicable, or country)	Sundom, Finland
VIII-4-1-4-3	Mailing address:	Kronvikintie 323 FI-65410 Sundom Finland
VIII-4-1-4-4	Citizenship:	FI
VIII-4-1-4-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	
VIII-4-1-4-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	10.3.2005

VIII-4-1-5-1	Name (LAST, First)	SUUTARINEN, Aki
VIII-4-1-5-2	Residence: (city and either US State, if applicable, or country)	Vaasa, Finland
VIII-4-1-5-3	Mailing address:	Pihkatie 12 A 5 FI-65320 Vaasa Finland
VIII-4-1-5-4	Citizenship:	FI
VIII-4-1-5-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	<i>Aki Suutarinen</i>
VIII-4-1-5-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	15.3.2005
VIII-4-1-6-1	Name (LAST, First)	ALANEN, Jarkko
VIII-4-1-6-2	Residence: (city and either US State, if applicable, or country)	Ylihärmä, Finland
VIII-4-1-6-3	Mailing address:	Koukkuluomantie 301 FI-62375 Ylihärmä Finland
VIII-4-1-6-4	Citizenship:	FI
VIII-4-1-6-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	<i>Jarkko Alanen</i>
VIII-4-1-6-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	10.3.2005
VIII-4-1-7-1	Name (LAST, First)	TUONONEN, Martti
VIII-4-1-7-2	Residence: (city and either US State, if applicable, or country)	Vaasa, Finland
VIII-4-1-7-3	Mailing address:	Fasaaninkatu 2 A 2 FI-65370 Vaasa Finland
VIII-4-1-7-4	Citizenship:	FI
VIII-4-1-7-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	<i>Martti Tuonen</i>
VIII-4-1-7-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	15.3.2005